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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,767	09/05/2003	Yong Yao	88508.0001	6895
42256	7590	04/20/2006	EXAMINER DUPUIS, DEREK L	
XIN WEN 3449 RAMBOW DRIVE PALO ALTO, CA 94306			ART UNIT 2883	PAPER NUMBER

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/655,767

Applicant(s)

YAO ET AL.

Examiner

Derek L. Dupuis

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-4 and 6-11 have been considered but are moot in view of the new ground(s) of rejection. The new ground(s) of rejection was necessitated by applicant's amendment to the claims.
2. The claim listing received 2/9/2006 has claims 1-4 and 6-11 pending examination and claims 5 and 12-20 cancelled.
3. Applicant's arguments, see page 15, in combination with the amendment to the claims filed 5/26/2005, with respect to the objection to the specification and to the objection of claims 1-4 and 6-10 have been fully considered and are persuasive. The objection to the specification and the objection to claims 1-4 and 6-10 have been withdrawn.

Election/Restrictions

4. Applicant's election without traverse of Species A in the reply filed on 11/22/2005 is acknowledged. Claims 1-4, and 6-11 read on Species A. Applicant has cancelled all other claims drawn to the non-elected species.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2883

6. Claims 1, 6, 8-11 are rejected under 35 U.S.C. 102(e) as being anticipated by *Loch et al (US 2002/0181900 A1)*.

7. Regarding claim 1, Loch et al teach a multi-channel optical transceiver module shown best in figure 15. The module includes a plurality of optical connector mountings (310, 311) and a plurality of optical subassemblies (323, 325) (OSA) each configured to be fixedly mounted in one of the optical connector mountings. Each of the OSA is configured to transform a first optical signal into a first electrical signal and to transform a second processed electrical signal into a second optical signal. A signal processing integrated circuit unit is electrically coupled to the plurality of OSA. The IC circuit unit is configured to process a first electrical signal to produce a first processed electrical signal and to process a second electrical signal to produce a second processed electrical signal. An electrical connector unit (316) is electrically coupled to the signal processing IC unit and is configured to output the first processed electrical signal and to transmit the second electrical signal to the signal processing IC unit. See paragraphs 27, 28, 34-39, 45, and 46.

8. Regarding claim 6, Loch et al teach a multi-channel optical transceiver module as discussed above in reference to claim 1. Loch et al teach that the transceiver module includes a module case comprising an upper case (302) and a lower case (304) as shown in figure 15. A set of handles (314) are attached to the lower case and to the upper case for easy plug-in or pullout of the module from a device.

9. Regarding claim 8, Loch et al teach a multi-channel optical transceiver module as discussed above in reference to claim 1. Loch et al also teach that the IC unit is disposed on a printed circuit board (328).

Art Unit: 2883

10. Regarding claims 9 and 10, Loch et al teach a multi-channel optical transceiver module as discussed above in reference to claim 1. Loch et al teach that the connector mountings (310, 311) include snap-on mechanisms that enable the OSA to be fixedly mounted in the connector mountings as shown in figure 15. The mountings also include grooves to receive the OSA as shown in figure 15.

11. Regarding claim 11, Loch et al teach a multi-channel optical transceiver module as discussed above in reference to claim 1. Loch et al also teach that four channels can be used. See figures 11 and 12.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Loch et al (US 2002/0181900 A1)* as applied to claims 1, 6, and 8-11 above, and further in view of *Norton (US 6,604,685 B1)*.

14. Regarding claims 2 and 3, Loch et al teach a multi-channel optical transceiver module as discussed above in reference to claim 1. Loch et al do not teach that the module includes a MPU. However, Norton teaches an optical transceiver module comprising an OSA unit and a signal processing unit (logic circuits) (see column 4, lines 20-35). Norton also teaches that the module includes a MPU for monitoring operation status of the OSA unit and of the signal

Art Unit: 2883

processing unit so as to send out monitoring information. Norton further teaches that an EEPROM can be used to record the information (see column 6, lines 36-42 of Norton).

15. It would have been obvious to one of ordinary skill in the art at the time of invention to use the MPU taught by Norton to monitor the operational status of the plurality of OSA units and of the plurality of signal processing units in the optical transceiver taught by Loch et al for the purpose of allowing the transceiver module to have the capability of managing and storing data in memory and to compute complex algorithms (see column 2, line 64 to column 3, line 9 of Norton).

16. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Loch et al (US 2002/0181900 A1)* as applied to claims 1, 6, and 8-11 above, and further in view of *Yonemura et al (US 2001/0024551 A1)*.

17. Regarding claim 4, Loch et al teach a multi-channel optical transceiver module as discussed above in reference to claim 1. Loch et al do not teach that the module includes an ESD grounding unit for shielding EMI. Yonemura et al teach an optical transceiver module including a cover with a grounding terminal (see paragraph 11).

18. It would have been obvious to one of ordinary skill in the art at the time of invention to use the ESD grounding cover unit taught by Yonemura et al to shield the EMI aroused by the electrical connector unit of the transceiver device taught by Loch et al. Motivation to do this would be to reduce the effects of EMI noise (see paragraph 11 of Yonemura et al).

19. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Loch et al (US 2002/0181900 A1)* as applied to claims 1, 6, and 8-11 above, and further in view of *Wike, Jr. et al (US 5,256,865)*.

Art Unit: 2883

20. Regarding claim 7, Loch et al teach a multi-channel optical transceiver module as discussed above in reference to claim 1. Loch et al do not teach that there is an indicator light to indicate the operational status of the transceiver module. Wike, Jr. et al teach an optical sensor including multiple indicator lights to indicate the operational status of the device based on monitored information (see column 4, lines 4-14).

21. It would have been obvious to one of ordinary skill in the art at the time of invention to use the indicator lights taught by Wike, Jr. et al on the front face of the optical transceiver module as taught by Loch et al for the purpose of representing valid or invalid operation of the device (see column 4, lines 11-14 of Wike, Jr. et al).

Conclusion

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2883

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derek L. Dupuis whose telephone number is (571) 272-3101.

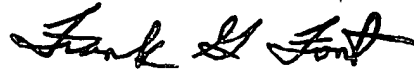
The examiner can normally be reached on Monday - Friday 8:30am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Derek L. Dupuis
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